240 Mercer St. New York 10012

OFFICIAL PROGRAM
THE 1973
International International has vashaued -beingligmon reding Computer Arts Festival... April 1 through 14

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and does much consulting and recently work.

Moores Challen

Vladimir Prozen PhD



THE FIRST SHIFT-KEY TYPEWRITER—1878

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ASTON METOUS

Computer generated musical notation

Graphics exhibited at the Computer Arts Festival

George Chaikin
Courant Institute of Mathematical Sciences
New York University, New York
Graphics co-ordinator of the Festival
One of the chief implementers of the
computer language ARTSPEAK, Mr. Chaikin is
also an architect. He is involved with many
different applications of computer graphics,
and does much consulting and research work.

Vladimir Drozen PhD
Hradec Králové, Czechoslovakia

9 stills from the film "CHEATION"

"The pictures are photographic records of the reflections of the sunlight from undulating water surfaces, thus representing solutions—at particular moments of time—of the two dimensional wave equation under specific—rather complicated—boundary and initial conditions. They have been obtained without any computing technique at all"—from Dr.Drozen's letter

Cyprienne Schroeppel
M.I.T., Cambridge, Massachusetts
14 x 16 inch needlepoint of one frame of the movie
"SOLAR CORONA" by Michael Beeler (film entry)

Ramesh Misra
ARKISHOP, New Delhi, India, and New York.
Computer animation by Walter Wright
Photography by Ramesh Misra.
Generated at Dolphin, Computer Image Corp.

Lou Katz Columbia University, New York "SPACE, TIME & SUBSTANCE" 40 slides "These pictures are a part of a study of three dimensional surfaces and shapes, and two dimensional patterns that change with time. The "double" images are stereoscopic pairs, and can be viewed in 3-D by those who can "cross" their eyes. These sldies were made using an ADAGE AGT/50 graphics computer, using programs by Lou Katz, Mr. Reidar Bornholdt, and Mr. Christos Tountas."

Aaron Marcus
Princeton University, Princeton, New Jersey
"Computer art promises to challenge more
profoundly than ever before what is real and what
is not." -Aaron Marcus; film: "THE BEGINNING"

Paul Hrozenchik, Bruce MacFarland students of George Chaikin, New York

William Fetter - see film entry

Gary Nelson - see music entry Computer generated musical notation Afternoon events of the Computer Arts Festival

Sunday April 1 5pm Lecture:

COMPUTERS AND THE ART OF MEDICINE

Juan de Dios Pozo-Olano, PhD, Fellow in Neurology

Mount Sinai School of Medicine, New York

Beginning with a brief survey, Dr. Pozo-Olano

will discuss in detail the work that he has done

using digital computers to record graphic representations of brain waves. Illustrated by slides.

Friday April 6 5pm Workshop:
VIDEO SYNTHESIS AND COMPUTERS
Walter Wright -see video entry

Saturday April 7 2pm SYMPOSIUM

COMPUTER COMPOSITION: Comparison of Aesthetics
and Techniques in All Media. All artists in the
Festival are invited as panelists. Chairman of
the meeting, George Chaikin. Proceedings will
be video taped, inch crews are welcome.
Microphones open to the floor.

Sunday April 8 5pm Lecture:

COMPUTER MUSIC Charles Dodge

Music co-ordinator of the Festival

Sunday April 8 1-4pm; Monday & Tuesday 9,10 5-7pm

COMPUTER INTERACTION Computers on hand will be open
to public use, to generate patterns, carry on conversations, etc. Computers courtesy of Leasco Response Co,
Electronics Associates Inc, and Pratt Institute.
Special workshop: Fred Stern, Sunday lpm

ALL EVENING PROGRAMS START AT 8PM, AND INCLUDE MUSIC, VIDEO &FILM:

Films shown during the Computer Arts Festival....continued- see next page

Laboratory, Depurtment of Deal go, Southern

independent Tilmaksh, Maplewood, Mey Jores,

Steven's Institute of Technology, Ratherford, New Jeres; Resident Visitor at the Bell Telephone Laboratories,

Assistance in programming from Jose Miller, Bell Land.

APLINIT LEYSET

"PIECE FOR SIX VOICES" "PAREARS"

April 10.11 Doris Chase
"CIRCLES"

Doris Chase now lives in New York, and is working
on a film named SQUARES. The film "CIRCLES" was made
using a 40/20 Stomberg Carlson plotter, computer
analyst Bob Tingley. This film was produced with
computer graphics animation techniques dveloped
under the direction of William Fetter at the Boeing
Aircraft Company, Seattle, Washington.

April 10,11 Aaron Marcus
"THE BEGINNING"- see graphics entry

Films shown during the Computer Arts Festival, 1973, at the Kitchen.

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April 1,2 William Fetter "VISUAL OVERTURE" "FILM SAMPLER" Previously the director of computer graphics Beginning with a brief survey D at the Boeing Aircraft Company, Seattle, William Fetter is currently adapting the technology he developed to other design/graphic representations, as Head, Computer Graphics
Laboratory, Department of Design, Southern Illinois University, Carbondale, Illinois.

VIDEO SYNTHESIS AND COMPUTER April 3,4 Michael Beeler (will be repeated, Apr. 12) "SOLAR CORONA" Artificial Intelligence Laboratory, MIT Cambridge, Massachusetts. Music by Peter Samson. SOLAR CORONA was made from data taken from August 14,1969 through May 7,1970, OSO-VI, one of the Orbitting Satellite Observatories. The sunlight which was measured in this experiment is only that of the corona, above work and of mego senongorolk the surface of the sun, is light of only one color, (wavelength 625 tor - 3 Angstroms), light from a seal and 8 Linga yabang heat of about 2 million degrees.

April 3,4,12 Peter Struycken IMAGE PROGRAMME-1-1972" Sunday April 8 1-4pm; Monday & Tuesday 9 Galerie Swart Amsterdam, Holland Computer programme by Drs. S. Tempelaars "In order to gain acquaintance with the premises was proposed and against applying to the reciprocity between element and structure, the changing degree of variation being the criterion, I make models which relate to this problem....One of these models is my image programme 1-1972. -from Peter Struycken's letter.

April 5,13,14 John Whitney "MATRIX III" Films shown during the Computer Arts Festival The Whitney family is famous for computer movies. April 10.11 Doris Chass This is John Whitney's newest film, sent from Pacific Palisades, California. Thanks to I.B.M. for making, this print, available.

Stan Vanderbeek warmen restoud mostred greenests us to a galass April 6,7 analyst Bob Tingley. Whis Tilm University of Southern Florida, Tampa Florida Mr. Vanderbeek is a famous filmmaker, formerly at M.I.T. Alrerett Company, Seattle, Washington,

April 8,9 Lillian Schwartz

1) "PIXILLATION" 2) "UFO's" 3) "MUTATIONS" 4) "ENIGMA"

5) "APOTHEOSIS" 6) "AFFINITIES" 7) "GOOGLEPIEX" 8) "MATHOMS" independent filmmaker, Maplewood, New Jersey

Arthur Layzer April 8,9 "MORNING ELEVATOR" Steven's Institute of Technology, Rutherford, New Jersey Resident Visitor at the Bell Telephone Laboratories, "The digital computer has negative expressivity-a black border that can be used to bring out human expressivity. Assistance in programming from Joan Miller, Bell Labs. ...ALSO: two pieces of computer music-"PIECE FOR SIX VOICES", "FANFARE"

May Tord

April 13,14

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"THE ILLIAD SUITE FOR STRING Performed live, New York debu

Music events in the International Computer Arts Festival

April 1,2 JOSEPH OLIVE "STUDIES # 4 & 5" Egra Size uses the FDF-5/10 system, and Bell Telephone Labs the EU NERE program devised by Buspien Smoll Murray Hill, New Jersey Employed in speech and acoustics April 10,11 F.RICHARD MORE
1) "VARIANTS" 2) "PIXILLATION" (original
Bell Telephone Laboratories, Murray Hil work at Bell Labs, Mr. Olive has a PhD in physics, and is a respected composer. He uses the GROOVE computer system, with 14 lines from a PDP-10. "Technological ort will succeed or

April 3,4 THOMAS WELLS "APOTHEGM G.K." Director of the Electronic Music Studio The University of Texas at Austin, Texas

April 3,4 JOEL GRESSEL Princeton University, Princeton New Jersey

5, 10, 11 CHARLES DODGE "THE SPEECH SONGS" School of Music, Columbia University, New York Mr. Dodge is an internationally known lecturer on the subject of computer music, and a composer of renown. He is the music co-ordinator of this Festival. for Radio Bremen, using a FEF-10.

6,7 EMMANUEL GHENT 1) "PHOSPHONES" 2) "COMPUTER
BRASS" 3) "INNERNESS" Bell Telephone Labs, and New York City. Well known as a composer of instrumental and electronic music, Emmanuel Ghent has in recent years devoted himself to synthesizing music and stage lighting by means of the GROOVE computer system.

Profes Toyon , Jefraco patifi pirojeta ant Purdue University, West Lafayette, Indiana Purdue University, West Lafayette, Indiana
4-Channel tapes, using MUSIC65, (a descendant
of MUSIC4) Also doing work in computer generated musical notation, in exhibit in the Kitchen. With Mr. James Lesko, who uses a computer to generate plans for steel sculpture, Mr. Nelson is combining sound with sculpture, by placing speakers within the object ...

8,9 MAX MATHEWS 1) RUNNING MAN SUITE,
2) "ELEPHANTS MAY SAFELY GRAZE" 3) "SCALES
4) "MISTAKES" Bell Telephone Labs, Murray Hill Max Mathews is a widely published author, an engineer, and a composer. He is largely responsible for the highly adaptable GROOVE computer system, which so many composers use, at Bell Labs.

4.5 STEPHEN SMOLIAR "SRVAR 6. CLIFF 2. SRVAR 3" &12th/ Department of Computer Science, Technion Haifa, Israel. Stephen Smoliar has devised a programming Language EUTERPE. The various pieces use the same program, with different thematic subroutines patched in.

5,12 EZRA SIMS "FROM AN OBOE QUARTET" Artificial Intelligence Lab. M.I.T. Cambridge, Massachusetts

Maric events in the International Computer Arts Festival

Bell Telephone Labs

April 5.4 JOEL GRESSEL

Festivel.

Music events in the Computer Arts Festival

Ezra Sims uses the PDP-6/10 system, and the EUTERPE program devised by Stephen Smoliar.

work at Bell Labs, Mr. Olive has F.RICHARD MOORE April 10,11 April 10,11 F.RICHARD MOORE

1) "VARIANTS" 2) "PIXILLATION" (original soundtrack)

Bell Telephone Laboratories, Murray Hill, New Jersey
"Technological art will succeed or fail according "Technological art will succeed or fail according to the success of the real time interaction as program ELITH CAMOHT A.E. LETGA opposed to only programming abstract structures. We have to maximize the capability to play the machine as an instrument.

April 9 ALISON KNOWLES "PROPOSITION 4 (SQUID)" New York Frinceton University, Princeton New Jeresty Performance piece for four voices

5,10,11 CHARLES DODGE "THE SPEECH SONGE" April 13,14 ALVIN LUCIER RMSIM 1 (THE BIRD OF BREMEN FLIES THROUGH THE HOUSES OF THE BURGHERS)" 1972 Wesleyan University, Middletown, Connecticut A computer controlled sound environment, comissioned for Radio Bremen, using a PDP-10, four channels.

6.7 EMMANUEL GHENT I) "PHOSPHONES April 13,14 RICHARD COFF Wesleyan University- student of Alvin Lucier

New York City, Well known as a co . ofsum ofnorfoole bus lefnemertant April 17 IEJAREN HILLER
"THE ILLIAC SUITE FOR STRING QUARTET" stringli ensis one cleum antaleedinge Performed live, New York debut. Musicians from the State University of New York, Buffalo The historic Illiac Quartet, never before played in New York, dates from the 1950s, and is a pioneering work, using a computer to carry out serial techniques, producing a veritable string quartet. Other works will will have at Arow males only (4018UM to be performed. Thanks to Jim Burton, of the Kitchen.

> system, which so many composers use, at Bell Lebs. 4.5 STEPHEN SMOLIAR "SRVAR 6. CLIFF 2. SRVAR 5" Al2th Department of Computer Science, Technica Hairs, largel, Stephen Smaller has deviced a progressing isnguage EUTSERT. Inc various places olisment ineretith different themseld and bedojag sentjuordus

generate plans for steel sculpture, Mr. Welson is combining sound with soulpure, by placing

8.9 MAX MATHEWS I) MUNNING MAN SUITE.
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5.12 EZRA SINS "FROM AN OBOE QUARTET" T.I.M ,dal sonspilledal latellita Cambridge, Massachusetts

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SACHTRY "STEET THERE", "NO TOWN

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computer animation, and assistance,

Music: G.B.Sachder: J. Brahma; Sackey

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April 2,3 Bill Etra "IMAGE WARP" Artist-in-residence WNET-TV Ch. 13, NYC Live performance, debut of the new RUTT/ETRA video synthesizer. The synthesizer, designed in conjunction with engineer Steven Rutt, has many advantages over previously existing systems-"Pray for sync!"

April 4,5 David Dowe, Jerry Hunt

1) "HARRINAN PLAYING HEISENBERG/ EYES"

and 2) "EIECTRIC EXO-SKETCH" Southern Methodist University Dallas, Texas Dancers are able to control video and audio signals by mia-electric pick ups which respond to discrete muscle movements, the X and Y co-ordinates are fed through a scan converter, allowing the two way reversibility of pictures sound.

April 6,7 Walter Wright, New York An architect, and a design engineer, he first became interested in computer generated images in 1965. Computer The Kitchen is you more profit by arki graphics system at University of Water-loo, Ontario, Canada; Computer animator for Dolphin Productions, Computer Image Corp, NYC; presently Artist-in-residence agen randimb .TK of sagadi Isloogs at WSKG- TV in Binghamton, NY, is designfor continued supporting secletan ing and building his own video synthesizer.

April 8,9 Ed Emshwiller "SCAPE MATES" Well known filmmaker, and Artist-in-residence at WNE T-TV Ch 13, New York. Made at the Experimental Television Lab, and at Dolphin, Computer Image Corp.; SCAPE-MATES is a hauntingly beautiful voyage into the depths of man/machine interaction, using expressive dance motions and computer animation, and geometric graphics.

April 10,11 Nam June Paik Artist in residence at WNET Ch.13, New York One of the Great Grand Parents of Video, in One of the Great Grand larger of video, fact said to be the "Mao Tse-Tung of video," electronically distorted images. A Korean, he has an engineer's degree from Tokyo, and is a famous artist of the avant-garde. He will show a film made with Michael Noll, James Tenney, of Bell Laboratories; and some video tapes of the synthesizer he designed with Shuya Abe.

April 10,11 Jud Yalkut "THE WHIRLING ECSTASY" Video-Film Collective. New York Thanks to Walter Wright "How can one undergo transformation without being shattered?" -Jalal'ud-din Rumi

Page 2....of Video Events during the Computer Arts Festival

TA TESTIMONO Lanoisamouni ent ni nineve cebil April 12.1 Dimitri Devyatkin "SACHDEV", "STEEP TURNS", "MO TOWN" Thanks to Walter Wright for the "GRAN MEANI" DIJE IIIE "INAGE WARP" computer animation, and assistance, Live performance, debut of the new RUTT/ETRA widoo synthesizer. Music: G.S.Sachdev; J.Brahms; Smokey Robinson and the Miracles, The Temptations, and the Adams and the Miracles, The Temptations, tion with sagineer Steven Butt, has and Marvin Gaye. Original graphics.

existing systems-"Frey for sync April 13,14 Ron Hays Artist-in-residence at WGBH-TV, Boston, Massachusetts Ron Hays, born in Nebraska, is a widely seen video artist. He plays the Paik/Abe synthesizer as a fully responsive, improvisatory instrument.

Dallas, Texas

bures sound

April 8,9 Ed Emahwil

at WHEG-TV Ch 15, New York.

April 10,11 Nem June Paik

Made at the Exportmental Television and at Dolphin, Computer Image Capp.

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ed the synthesizer he designed with Shuya Abe.

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"You one unied Juodilw nolimerotenest ograbau ene men wolf

he has an engineer's degree from Tokyo, and is a femous artist of the svent-gards.

Video-Film Collective, New York

Thenks to Walter Wright

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April 6:7 Walter Wright, New York

SYMPOSIUM: April 7 at 2pm*** Will be video taped. Other tinch video recording crews are welcome- detected of backer delaw panelists will have two microphones, one on the sales of the sales and the sales of is through a scan converter, as floor. mixed.

THE COMPUTER ARTS FESTIVAL is supported by a special ne first became interes grant from the New York State Council on the Arts. The Kitchen is run non-profit by artists, and audience graphics system at Unit contributions are split to pay the artists and the loo, Ontario, Canada; Kitchen's expenses.

Special thanks to Mr. Shridhar Bapat, of the Kitchen for continual supporting assistance. This Festival would not have been possible without the support of the entire Kitchen: Jim Burton, Bob Stearns, Michael Tschudin, Woody and Steina Vasulka, and Howard Wise.

Graphics coordinator: George Chaikin

Music co-ordinator: Charles Dodge

voyage into the depths of man/machin General Co-ordinator: Dimitri Devyatkin was suissengse galas goldonional

ALL EVENING PROGRAMS BEGIN AT 8PM, lasting approximately 22 hours. Programs subject to change without notice.